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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/902,890 | 07/12/2001 | Leigh Allen Williamson | AUS920010326US1 | 1623 |

7590 07/14/2004
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| EXAMINER |
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ZHEN, LI B

| ART UNIT | PAPER NUMBER |
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2126

DATE MAILED: 07/14/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/902,890

Applicant(s)

WILLIAMSON ET AL.

Examiner

Li B. Zhen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1 – 21 are pending in the application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1 – 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication NO. 2002/0004850 to Sudarshan in view of U.S. Patent NO. 6,633,923 to Kukura.**

4. As to claim 1, Sudarshan teaches the invention substantially including a method of providing an extension [messaging object for putting messages into and getting messages from the messaging service 26. This is referred to as a plug-in implementation or plug-in module; p. 5, paragraph (0047), p. 6, paragraph (0056)] to a default set of messaging resource functions [a messaging server 26; p. 3, paragraph (0033)] in an enterprise application server [EJB-enabled server 28, Fig. 5; p. 3, paragraph (0033)], the application server having a default context factory class, the method comprising the steps of:

providing a extension messaging service provider [plug in module using JMS messaging calls and publish subscribe method for communication. This abstraction

layer is written for each messaging server 26 supported by the messaging engine; p. 6; paragraph (0056)] on an application server node [EJB-enabled server 28, Fig. 5; p. 3, paragraph (0033)], the extension messaging service provider having a name, description [Messaging Descriptor, which is a generic object that contains details about the messaging server 26. Details like topic name, queue name, etc. could be stored into this object; p. 5, paragraph (0055)]; and

creating extension connection factory [topicConnectionFactory = new com.sun.messaging.TopicConnectionFactory(jmsAddress, msgDescriptor.getPortNumbe()); p. 6, code example after paragraph (0056)] and destination resources in an application server administration domain [deployment tool of the messaging engine facilitates the generation of asynchronous stubs of the bean's home and remote interfaces; p. 3, paragraph (0037)], such that application programs may subsequently access and use the extension messaging service provider, connection factory and destination resources by performing an indirect naming service lookup through the default context factory [client system 24 makes a lookup method call to the JNDI for a particular enterprise bean....Once the asynchronous stub reference is retrieved, the client system 24 can make method calls, which are converted to messages and transferred to the EJB-enabled server 28 using messaging calls; p. 7, paragraph (0066)].

5. Although Sudarshan teaches the invention substantially as claimed, Sudarshan does not teach binding references to extension connection factories and destination resources into a namespace.

However, Kukura teaches providing an extension to a default set of messaging resource functions [ART architecture allows plug-ins to participate in the processing of requests by supplying interceptors that are included in bindings; col. 13, lines 10 – 20], the extension messaging service provider having an initial context factory [Each message interceptor factory's...implementation is called in order to determine if the plug-in will participate in the binding; col. 34, lines 45 – 67] and a provider universal resource locator [plug-in uses I.P. addresses to specify host addresses in published IOR TAG_INTERNET_TOP profiles; col. 41, lines 26 - 35], and binding references to the extension connection factories and destination resources into a namespace [ART core attempts to construct a binding as follows: First, it calls the get_interceptor() operation on the factory for the interceptor closest to the network; col. 10, lines 47 – 65].

6. It would have been obvious to a person of ordinarily skilled in the art at the time of the invention to apply the teaching of binding references to extension connection factories and destination resources into a namespace as taught by Kukura to the invention of Sudarshan because this establishes a negotiated protocol and services that allow the client to make invocations on the target object, and any shared state required by the protocol and services at the client and server [col. 5, lines 33 – 48 of Kukura].

7. As to claim 2, Sudarshan as modified teaches specifying a classpath on the application server node [location request is a query regarding the location of the target object; col. 16, lines 23 – 33 of Kukura].

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8. As to claim 3, Sudarshan as modified teaches specifying a location of the extension messaging service provider's jar file on the application server node [call includes the name of the enterprise bean in the lookup argument of the JNDI to get a reference of the home interface; p. 7, paragraph (0066) of Sudarshan].

9. As to claim 4, Sudarshan as modified teaches the step of specifying a classpath on an application server node includes specifying a naming service binding mechanism class name [instance of the ART_BindingManagerImpl implementation of the ART_Binding::BindingManager interface is constructed for each ORB instance during RB initialization; col. 9, lines 43 – 49 of Kukura].

10. As to claim 5, Sudarshan as modified teaches the step of creating extension connection factory and destination resources in an application server administration domain [see claim 1] includes specifying a name, description [Messaging Descriptor, which is a generic object that contains details about the messaging server 26; p. 5, paragraph (0055) of Sudarshan], and an external naming service name [call includes the name of the enterprise bean in the lookup argument of the JNDI to get a reference of the home interface; p. 7, paragraph (0066) of Sudarshan].

11. As to claim 6, Sudarshan as modified teaches the step of specifying a name, description, and an external naming service name includes specifying a location where the extension connection factory [mechanisms for object adapter plug-ins to create new

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IORs, and for plug-ins providing location daemon functionality to manipulate IORs in order to return location forward responses; col. 43, lines 1 – 10 of Kukura] and destination resources were bound into the namespace [ART core attempts to construct a binding as follows: First, it calls the get_interceptor() operation on the factory for the interceptor closest to the network; col. 10, lines 47 – 65 of Kukura].

12. As to claim 7, Sudarshan as modified teaches the step of providing an extension messaging service provider comprises providing a Java Messaging Service provider [plug in module using JMS messaging calls and publish subscribe method for communication. This abstraction layer is written for each messaging server 26 supported by the messaging engine; p. 6, paragraph (0056) of Sudarshan].

13. As to claims 8 – 14, these are product claims that correspond to method claims 1 – 7; note the rejections to claims 1 – 7 above, which also meet these product claims.

14. As to claims 15 – 21, these are system claims that correspond to method claims 1 – 7; note the rejections to claims 1 – 7 above, which also meet these system claims.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent Application Publication No. 2002/0004848 to Sudarshan et al. teaches a system and method of providing an asynchronous interface between a client system and an enterprise JavaBeans-enabled server.

U.S. Patent Application Publication No. 2003/0005117 to Kang et al. teaches a pluggable authentication and access control for a messaging system.


16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Li B. Zhen whose telephone number is (703) 305-3406. The examiner can normally be reached on Mon - Fri, 8:30am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (703) 305-9678. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

lbz
July 8, 2004

Li B. Zhen
Examiner
Art Unit 2126



ST. JOHN COURTENAY III
PRIMARY EXAMINER